

Claims

1. (Previously Presented) A biaxially oriented white polypropylene film for thermal transfer recording comprising a film containing polypropylene resin having a β -crystal ratio of about 30% or more and a melting temperature of about 140 to about 172°C, and which has substantially non-nucleus voids, a void ratio of about 30 to about 80% and a sum of strengths of longitudinal direction and of transverse direction of the film at 2% elongation (F2 value) being in the range of about 10 to about 70 MPa and a surface glossiness being in the range of about 10 to about 145 %, and having a cushion factor of about 16 to about 30%.

2. (Previously Presented) A biaxially oriented white polypropylene film for thermal transfer recording comprising a skin layer (B layer) having a surface glossiness of about 10 to about 145% is laminated to at least one side of a core layer (A layer) comprising polypropylene resin having a β -crystal ratio of about 30% or more, a melting temperature of about 140 to about 172°C, and which has substantially non-nucleus voids, a void ratio of about 30 to about 80% and a sum of the strengths of longitudinal direction and of transverse direction of the film at 2% elongation (F2 value) being in the range of about 10 to about 70 MPa, and having a cushion factor of about 16 to about 30%.

3. (Previously Presented) A biaxially oriented white polypropylene film for thermal transfer recording comprising a skin layer (B layer) having a surface glossiness of about 10 to about 145 % laminated to at least one side of a core layer (A layer), wherein a sum of strengths of longitudinal direction and of transverse direction of the film at 2% elongation (F2 value) is in the range of about 30 to about 100 MPa and that the film has β -crystal activity, and having a cushion factor of about 16 to about 30%.

4. (Currently Amended) The biaxially oriented white polypropylene film according to claim 2, wherein the B layer is at least one or more kinds of resin selected from the group consisting of polyolefin based resins, acryl based resins, polyester based resins and polyurethane based resins.

5. (Previously Presented) The biaxially oriented white polypropylene film according to claim 1, wherein a specific gravity of the film is in the range of about 0.2 to about 0.8.

6. (Previously Presented) The biaxially oriented white polypropylene film according to claim 1, wherein an average surface roughness (Ra) of at least one side is about 0.02 to about 1 μm .

7. (Previously Presented) The biaxially oriented white polypropylene film according to claim 1, wherein a thermal conductivity is about 0.14 W/mK or less.

8. (Previously Presented) A biaxially oriented white polypropylene film for thermal transfer recording comprising a film with a skin layer (B layer) having a half-crystallization time of about 60 seconds or less and a surface glossiness of about 30 to about 145 % laminated to at least one side of a core layer (A layer) comprising polypropylene resin having a substantially non-nucleus void, wherein the film has a specific gravity of about 0.3 to about 0.7 and β -crystal activity, and having a cushion factor of about 16 to about 30%.

9. (Previously Presented) The biaxially oriented white polypropylene film according to claim 8, wherein a crystallization temperature (Tc) of the B layer is about 115 °C or more.

10. (Previously Presented) The biaxially oriented white polypropylene film according to claim 8, wherein a void ratio of the B layer is about 0.1 to about 5 %.

11. (Previously Presented) The biaxially oriented white polypropylene film according to claim 8, wherein an average surface roughness (Ra) of the B layer is about 0.01 to about 0.5 μm .

12. (Previously Presented) The biaxially oriented white polypropylene film according to claim 2, wherein the B layer contains at least one selected from the group consisting of an immiscible resin, an inorganic particle and an organic particle.

13. (Previously Presented) The biaxially oriented white polypropylene film according to claim 1, having an optical density (OD) in the range of about 0.4 to about 1.

14. (Previously Presented) The biaxially oriented white polypropylene film according to claim 1, having a whiteness of about 50% or more, L* value of about 50 or more, a* value of about -2 to about 5, and b* value of about -5 to about -0.01.

15. (Cancelled)

16. (Previously Presented) A receiving sheet for thermal transfer recording comprising a receiving layer provided at least on one side of the biaxially oriented white polypropylene film according to claim 1.

17. (Previously Presented) The receiving sheet according to claim 16, further comprising an anchor layer provided between the receiving layer and the film.

18. (Previously Presented) The receiving sheet according to claim 17, wherein the anchor layer contains at least one or more kinds of resins selected from the group consisting of acryl based resins, polyester based resins and polyurethane based resins.

19. (Previously Presented) The biaxially oriented white polypropylene film according to claim 3, wherein the B layer is at least one or more kinds of resin selected from the group

consisting of polyolefin based resins, acryl based resins, polyester based resins and polyurethane based resins.

20. (Previously Presented) The biaxially oriented white polypropylene film according to claim 2, wherein a specific gravity of the film is in the range of about 0.2 to about 0.8.

21. (Previously Presented) The biaxially oriented white polypropylene film according to claim 3, wherein a specific gravity of the film is in the range of about 0.2 to about 0.8.

22. (Previously Presented) The biaxially oriented white polypropylene film according to claim 2, wherein an average surface roughness (Ra) of at least one side is about 0.02 to about 1 μm .

23. (Previously Presented) The biaxially oriented white polypropylene film according to claim 3, wherein an average surface roughness (Ra) of at least one side is about 0.02 to about 1 μm .

24. (Previously Presented) The biaxially oriented white polypropylene film according to claim 2, wherein a thermal conductivity is about 0.14 W/mK or less.

25. (Previously Presented) The biaxially oriented white polypropylene film according to claim 3, wherein a thermal conductivity is about 0.14 W/mK or less.

26. (Previously Presented) The biaxially oriented white polypropylene film according to claim 3, wherein the B layer contains at least one selected from the group consisting of an immiscible resin, an inorganic particle and an organic particle.

27. (Previously Presented) The biaxially oriented white polypropylene film according to claim 8, wherein the B layer contains at least one selected from the group consisting of an immiscible resin, an inorganic particle and an organic particle.

28. (Previously Presented) The biaxially oriented white polypropylene film according to claim 2, having an optical density (OD) is in the range of about 0.4 to about 1.

29. (Previously Presented) The biaxially oriented white polypropylene film according to claim 3, having an optical density (OD) is in the range of about 0.4 to about 1.

30. (Previously Presented) The biaxially oriented white polypropylene film according to claim 8, having an optical density (OD) is in the range of about 0.4 to about 1.

31. (Previously Presented) The biaxially oriented white polypropylene film according to claim 2, having a whiteness of about 50% or more, L* value of about 50 or more, a* value of about -2 to about 5 , and b* value of about -5 to about -0.01.

32. (Previously Presented) The biaxially oriented white polypropylene film according to claim 3, having a whiteness of about 50% or more, L* value of about 50 or more, a* value of about -2 to about 5 , and b* value of about -5 to about -0.01.

33. (Previously Presented) The biaxially oriented white polypropylene film according to claim 8, having a whiteness of about 50% or more, L* value of about 50 or more, a* value of about -2 to about 5 , and b* value of about -5 to about -0.01.

34-36. (Cancelled)

37. (Previously Presented) A receiving sheet for thermal transfer recording comprising a receiving layer provided at least on one side of the biaxially oriented white polypropylene film according to claim 2.

38. (Previously Presented) A receiving sheet for thermal transfer recording comprising a receiving layer provided at least on one side of the biaxially oriented white polypropylene film according to claim 3.

39. (Previously Presented) A receiving sheet for thermal transfer recording comprising a receiving layer provided at least on one side of the biaxially oriented white polypropylene film according to claim 8.